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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,270	12/12/2001	Michael Black	RLT-112	9155
758	7590	06/06/2006	EXAMINER	
FENWICK & WEST LLP SILICON VALLEY CENTER 801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041			JUNG, WILLIAM C	
			ART UNIT	PAPER NUMBER
			3768	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/020,270

Applicant(s)

BLACK, MICHAEL

Examiner

William Jung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-99 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-99 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/3/06, 5/09/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-99 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18, 24, 26, 28-49, 55, 57-70, 76, and 78-99 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Lemelson* (US 5,995,866) as applied to in view of *DeBaryshe et al* (US 5,713,364).

Lemelson substantially disclose all claimed features in claims 1-18, 24, 26, 28-49, 55, 57-70, 76, and 78-99.

Claims 1-5, 13-18, 24, 30, 34, 35, 39-44, 48, 49, 55, 58, 60-65, 69, 70, 76, 79, and 95-99: Lemelson discloses a method and apparatus where multiple laser diagnostic beams are simultaneously deliver a laser diagnostic beam to a targeted region for diagnosis using fluorescence emission with each laser having variable control of laser beam parameter such as power level or intensity, wavelengths, fluence, spot size (aperture), and linear delivery of the laser by scanning along a surface (raster scan), and three dimensional parameter (col. 5, lines 48-65; col. 6, lines 9-19; col. 6, lines 49-59). In addition, Lemelson discloses further that the diagnostic laser can be combined to

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delivery therapeutic laser treatment to the region of interest (col. 9, lines 39-45). The apparatus also includes computer/microprocessor where the parameters of the laser beam and detection 41a are in operation with the master computer microprocessor as shown in figure 5. Figure 5 also shows that each laser element 59 and 60 are controlled separate control. However, Lemelson do not specifically disclose that the combined diagnostic beams are co-propagating. In optical imaging art, the combination of light or laser beam which co-propagate is well known as taught by DeBaryshe et al where the two propagating beams 202 and 203 intersect thus becoming co-propagating at region L as shown in figure 3A (col. 12, lines 22-54). Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to apply the teachings of DeBaryshe et al's co-propagating beam to Lemelson's device and method above to improve the propagation of the beams to substantially focus on the common region.

Claims 6-9: Lemelson disclose of detection element 31 in figure 2 which detects fluorescence emission and analyzed by image and spectral analyzing computer as shown in figure 6.

Claims 10-12, 26, 28, 29, 45-47, 57, 66-68, and 78: Lemelson shows in figures 3 and 4 where the laser beam emitters 41, 46 and 41', 46' have multiple optical path with articulated arms or waveguides. The laser beams elicit fluorescent emission from the target, which crosses path from the photodetector to acquire image data (col. 7, lines 9-39; figure 7).

Claims 30-33, 59, and 80: Lemelson discloses that the means to enhance fluorescence emission includes scanning biological tissue, chemical compound,

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biochemical compound, physical structure, fluid, food, or bioengineer composition (col. 5, lines 16-27).

Claims 36-38: Lemelson discloses that the apparatus is handheld device and it is portable (col. 1, lines 41-45).

4. Claims 19-23, 27, 50-54, and 71-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Lemelson* and *DeBaryshe et al* as applied to claims 1, 26, 39, and 60 above, and further in view of *Sevick-Muraca et al* (US 5,865,754).

Lemelson and DeBaryshe et al substantially disclose all claimed features in claims 19-23, 27, 50-54, and 71-75 as described above. However, neither Lemelson nor DeBaryshe et al explicitly teach a laser delivery comprises a mirror-based optical delivery with beam splitter. In Sevick-Muraca et al, is it well known in the art at the transmission of laser is achieve with beam splitter 126 (in figure 1), which is a mirror based optical delivery. Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to apply the teachings of Sevick-Muraca et al to Lemelson and DeBaryshe et al's apparatus above where the transmission of the laser is controlled by beam splitter.

5. Claims 25, 56, and 77 rejected under 35 U.S.C. 103(a) as being unpatentable over *Lemelson* and *DeBaryshe et al* as applied to claim 1 above, and further in view of *Richards-Kortum et al* (US 5,421,337).

Lemelson and DeBaryshe et al substantially disclose all claimed features in claims 25, 56, and 77 as described above. However, neither Lemelson nor DeBaryshe et al specifically teach the application of the laser in endoscope delivery means. In Richards-Kortum et al, it is well known in the art that the laser imaging can be achieved

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by placing laser with optical fiber in a diagnostic probe (figure 1a, 1b, and 28), which is used endoscopically to image the cavities of a patient. Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to apply the teachings of Richards-Kortum et al to Lemelson and DeBaryshe et al's apparatus above to image the inner cavities of the patient.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Jung, Ph.D. whose telephone number is 571-272-4739. The examiner can normally be reached on Mon-Fri 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on 571-272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WJ
May 29, 2006


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